Introductions.
This project was originally funded through a federal grant under the Department of Justice (DOJ), specifically the Community Oriented Policing Services (COPS) program. The Rural Methamphetamine Education Project (RMEP) was part of the Rural Crime and Justice Center (RCJC), a University Center of Excellence at Minot State University. RMEP provided education and awareness to ND communities about methamphetamine and other drugs.

This section details the cycle of abuse that a meth user experiences.
Methamphetamine is typically used on a daily basis, and the high from methamphetamine lasts 8 - 24 hours. This drug has become the growing illicit drug of choice among young women because it is affordable, readily available, is an effective appetite suppressant, libido increaser, energy enhancer and mood elevator.

The “rush” or “flash” is determined by the route of administration. Smoking and injecting are the quickest ways to get the drug to the brain so the user can start to feel the effects. If the user is snorting or swallowing, it takes longer to feel the effects.
It has been described as an extreme euphoria. There is also a stronger potential for addiction when the more rapid-acting routes of administration are used.

Meth use results in an accumulation of dopamine (and serotonin) in the pleasure areas of the brain - excessive dopamine produces the euphoria and stimulation that the user is trying to achieve. Methamphetamine not only blocks the feedback mechanism of the nerve cells (the transporter - which normally takes the chemical back up and saves it), but also reverses that transporter pushing the dopamine out faster.
The rush is then followed (in essentially all methods of use – not just smoking or injecting) by feelings of euphoria or extreme well-being.

The desired effects of meth use are directly related to the dopamine and serotonin released. Dopamine release causes euphoria (feeling of well-being), excitement, and intensification of emotions, unusual motor movements, elevation of self-esteem, increased alertness and aggression, decreased appetite and elevation of libido.

Elevated levels of serotonin result in increased feelings of empathy and closeness as well as a generalized state of well-being. The undesired effects of serotonin include bruxism, bizarre mood changes, psychotic behavior and aggressiveness.

Low-intensity abusers want the extra stimulation the meth provides so that they can stay awake long enough to finish a task or a job, or they want the appetite suppressant effect to lose weight. They may include people such as truck drivers trying to reach their destination, workers trying to stay awake until the end of their normal shift or an overtime shift, and housewives trying to keep a clean house as well as be a perfect mother and wife.

The user will repeatedly use the drug (binge) until they ultimately "crash." Tolerance to the pleasurable effects of the drug occurs within minutes but before the blood concentrations fall.
Methamphetamine use causes dilated pupils, dry mouth, elevated blood pressure, tachycardia (high heart rate), decreased oxygen delivery to the extremities resulting in poor circulation (which contributes to skin lesions), dental decay, increased temperature of major organ systems, decreased appetite (therefore, weight loss), and increased libido.

<table>
<thead>
<tr>
<th>Cycle of Abuse</th>
<th>Methamphetamine use causes dilated pupils, dry mouth, elevated blood pressure, tachycardia (high heart rate), decreased oxygen delivery to the extremities resulting in poor circulation (which contributes to skin lesions), dental decay, increased temperature of major organ systems, decreased appetite (therefore, weight loss), and increased libido.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle of Abuse</td>
<td>With high-intensity abusers, each successive rush becomes less euphoric, and it takes more methamphetamine to achieve it. Each high is not quite as high as the one before. During each subsequent binge, the abuser needs more methamphetamine, more often, to get a high that is not as good as the high he wants or remembers.</td>
</tr>
<tr>
<td>Cycle of Abuse</td>
<td>The user will continue to use (&quot;tweaking&quot;) in order to try to recreate the pleasure high as a part of the binge cycle. This is the part of the cycle that is the most physiologically dangerous to the user as well as creates the greatest potential for violence.</td>
</tr>
<tr>
<td>Cycle of Abuse</td>
<td>These individuals are frequently violent, bizarre acting, excessively anxious, confused and unable to sleep. Psychotic features are very common as an effect of this drug as well. These individuals can show paranoia, visual and auditory hallucinations, mood disturbances, delusions, homicidal thoughts, suicidal thoughts, and out of control rages.</td>
</tr>
</tbody>
</table>

* High-Intensity Methamphetamine Abuse
  - Psychologically addicted, often called "speed freaks."
  - Their existence focuses on preventing the crash, and they seek that elusive, perfect high, like they had when they first started smoking or injecting methamphetamine.
  - Tweaking begins to occur.

* Tweaking occurs at the end of the binge when nothing will take away the feeling of emptiness and dysphoria, including taking more methamphetamine.
  - Tweaking is very uncomfortable, and the abuser often takes a depressant to ease the bad feelings.
  - The most popular depressant is alcohol, with heroin a close second.
Most of these are standard de-escalation techniques. Bright lights stimulate an already overly stimulated tweaker. Many tweakers will view sudden movements as threatening, and a hidden hand will cause them to wonder if you are reaching for something to restrain them – like handcuffs.

If you can keep the tweaker talking (about anything!) it gives you an idea of what is going on in their head, and can hopefully keep them distracted and prevent them from seeing you as a threat and attacking you. The tweaker does not need provocation to react violently; however, confrontation increases the chance for a violent reaction. Besides confrontation, nobody knows for certain what will trigger a tweaker to be irrational and violent. A tweaker exists in his own world, seeing and hearing things that no one else can perceive. Hallucinations are so vivid that they seem real.

Once the user finally "crashes" they are frequently unarousable for many hours due to extreme depletion of endogenous neurotransmitters. To a binge abuser, the crash means an incredible amount of sleep. The body's epinephrine has been depleted, and the body uses the crash to replenish its supply. Even the meanest, most violent abuser becomes almost lifeless during the crash and poses a threat to no one. The crash can last 1-3 days.

After the crash, the abuser returns to normal--a state that is slightly deteriorated from the normal state before he used methamphetamine. This stage ordinarily lasts between 2 and 14 days. However, as the frequency of binging increases, the duration of the normal stage decreases.
The dopamine stores eventually become depleted, as the nerve cells cannot keep up with the amount of dopamine released and not returned to the cells. Damage to the nerve cells themselves has also been documented.

Behavioral changes can persist for years after drug use is discontinued. An acute methamphetamine psychosis has been described in the medical literature. This is characterized by extreme paranoia, well-formed delusions, hypersensitivity to environmental stimuli, stereotyped "tweaking" behavior, panic, extreme fearfulness, and a high potential for violence.

Alternate visual for the cycle of abuse.